

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

ATTY DOCKET NO
1781-01654

APPLICATION NO.
NEW

APPLICANT

Zhiyuan GONG et al.

09/913898

FILING DATE

August 17, 2001

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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UNASSIGNED

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS

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		Westerfield, M., Wegner, J., Jegalian, B.G., DeRobertis, E.M., and Puschel, A.W. (1992). Specific activation of mammalian Hox promoters in mosaic transgenic fish. <i>Gen. Dev.</i> 6, 591-598.
		Wright, G., Carver, A., Cottom, D., Reeves, D., Scott, A., Simons, P., Wilmut, I., Garner, I. and Colman, A. (1991) High level expression of active human alpha-1-antitrypsin in the milk of transgenic sheep. <i>Biotechnology</i> 9:830-4
		Xu, Y., He, J., Ho, L.T., Chan, H.C., Liao, J., Yan, T., Lam, T.J. and Gong, Z. (1999) Fast skeletal muscle-specific expression of a zebrafish myosin light chain 2 gene and characterization of its promoter by direct injection into skeletal muscle. <i>DNA Cell Biol.</i> 18, 85-95.
		Yang, T.T., Cheng LZ, and Kain SR (1996) Optimized codon usage and chromophore mutations provide enhanced sensitivity with the green fluorescent protein. <i>Nucleic Acids Res.</i> 24, 4592-4593.
		Zelenin, A.V., Alimov, A.A., Barmintzev, V.A., Beniumov, A.O., Zelenina, I.A., Krasnov, A.M., and Kolesnikov, V.A. (1991). The delivery of foreign genes into fertilized fish eggs using high-velocity microinjectiles. <i>FEBS lett.</i> 287, 118-120.
		Zhu, Z., Li, G., He, L. and Chen, S. (1985). Novel gene transfer into the fertilized eggs of goldfish (<i>Carassius auratus</i> L. 1758). <i>Z. Angew. Ichthyol.</i> 1:31-34.
		Müller, F., Williams, D.W., Kobolak, J., Gauvry, L., Goldspink, G., Orbán, L. and MacLean, N. (1997). Activator Effect on Coinjected Enhancers on the Muscle-Specific Expression of Promoters in Zebrafish Embryos. <i>Molecular Reproduction and Development</i> 47:404-412
		Gong, Z. (1988). Transgenic Fluorescent Fish. <i>APBN</i> 2:16:280
		Seah, L., Making zebra fish that glow in the dark. <i>The Straits Times</i> (Aug. 10, 1998)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		ATTY DOCKET NO. 1781-01631	APPLICATION NO. NEW		
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		APPLICANT Zhiyuan GONG et al.		09/913898	
		FILING DATE August 17, 2001			
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U.S. PATENT DOCUMENTS					
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS SUB CLASS	FILING DATE IF APPROPRIATE
FOREIGN PATENT DOCUMENTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS SUB CLASS	TRANSLATION YES NO
76	9 8 5 6 9 0 2	Dec. 17, 1998	WO		
	9 8 1 5 6 2 7	Apr. 16, 1998	WO		
	9 6 0 3 0 3 4	Feb. 8, 1996	WO		
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	76	Amsterdam, A., Lin, S., and Hopkins, N. (1995). The <i>Aequorea victoria</i> green fluorescent protein can be used as a reporter in live zebrafish embryos. <i>Dev. Biol.</i> 171, 123-129.			
		Amsterdam, A., Lin, S., Moss, L.G., and Hopkins, N. (1995). Requirements for green fluorescent protein detection in transgenic zebrafish embryos. <i>Gene</i> 173, 99-103.			
		Bayer, T.A. and Campos-Ortega, J.A. (1992). A transgene containing lacZ is expressed in primary sensory neurons in zebrafish. <i>Development</i> 115, 87-91.			
		Brem, G., Brenig, B., Horstgen-Schwark, and Winnacker, E.-L. (1988). Gene transfer in tilapia (<i>Oreochromis niloticus</i>). <i>Aquaculture</i> 68, 209-219.			
		Chalfie, M., Tu, Y., Euskirchen, G., Ward, W.W., and Prasher, D.C. (1994). Green fluorescent protein as a marker for gene expression. <i>Science</i> 263, 802-805.			
		Chen, J.Y., Tsai, H.L., Chang, C.Y., Wang, J.I., Shen, S.C. and Wu, J.L. (1998). Isolation and characterization of tilapia (<i>Oreochromis mossambicus</i>) insulin-like growth factors gene and proximal promoter region. <i>DNA Cell Biol.</i> 17, 359-376			
		Chen, X.Z., Yun, J.S. and Wagner, T.E. (1988). Enhanced viral resistance in transgenic mice expressing the human beta 1 interferon. <i>J Virol</i> 62:3883-7			
		Chourrout, D., Guyomard, R., Houdebine, L.M. (1986). High efficiency gene transfer in rainbow trout (<i>Salmo gairdneri</i>) by microinjection into egg cytoplasm. <i>Aquaculture</i> 51, 143-150.			
		Chourrout, D., Guyomard, R., Houdebine, L.M. (1986). High efficiency gene transfer in rainbow trout (<i>Salmo gairdneri</i>) by microinjection into egg cytoplasm. <i>Aquaculture</i> 51, 143-150.			
		Cormack, B.P., Valdivia, R.H., and Falkow, S. (1996). FACS-optimized mutants of the green fluorescent protein (GFP). <i>Gene</i> 173, 33-38.			
		Cozzi, E. and White, D.J.G. (1995). The generation of transgenic pigs as potential organ donors for humans. <i>Nature Medicine</i> 1:964-966.			
EXAMINER	DATE CONSIDERED				
	10/24/01				
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		Delvin, R.H., Yesaki, T.Y., Blagl, C.A., Donaldson, E.M., Swanson, P. and Chan, W.K. (1994). Extraordinary salmon growth. <i>Nature</i> 371, 209-210				
		Delvin, R.H., Yesaki, T.Y., Donaldson, E.M., Du, S.J. and Hew, C.L. (1995). Production of germline transgenic pacific salmonids with dramatically increased growth performance. <i>Can. J. Fisheries Aqua. Sci.</i> 52, 1376-1384.				
		Du, S.J., Gong, Z., Fletcher, G.L., Shears, M.A., King, M.J., Idler, D.R., and Hew, C.L. (1992). Growth enhancement in transgenic Atlantic salmon by use of fish antifreeze/growth hormone chimeric gene constructs. <i>Bio/Technology</i> 10:176-181.				
		Gomez-Chiarri, M., Livingston, S.K., Muro-Cacho, C., Sanders, S., and Levine, R.P. (1996) Introduction of foreign genes into the tissue of live fish by direct injection and particle bombardment. <i>Dis. Aquat. Org.</i> 27, 5-12.				
		Gong, Z., Fletcher, G., and Hew, C.L. (1992). Tissue distribution of fish antifreeze protein mRNAs. <i>Can. J. Zool.</i> 70, 810-814.				
		Gong, Z., Yan, T., Liao, J., Lee, S.E., He, J., and Hew, C.L. (1997). Rapid identification and isolation of zebrafish cDNA clones. <i>Gene</i> 201, 87-98.				
		Gordon, J.W., Scangos, G.A., Plotkin, D.J., Barbosa, J.A. and Ruddle, F.H. (1980). Genetic transformation of mouse embryos by microinjection of purified DNA. <i>Proc. Natl. Acad. Sci. USA.</i> 77:7380-7384.				
		Gross, M.L., Schneider, J.F., Mova, N., Moav, B., Alvarez, C., Myster, S. H., Liu, Z., Hallerman, E.M., Hackett, P. B., Guise, K.S., Faras, A. J., and Kapuscinski, A.R. (1992). Molecular analysis and growth evaluation of northern pike (<i>Esox lucius</i>) microinjected with growth hormone genes. <i>Aquaculture</i> 103, 253-273.				
		Higashijima, S.-I., Okamoto, H., Ueno, N., Hotta, Y., and Eguchi, G. (1997). High-frequency generation of transgenic zebrafish which reliably express GFP in whole muscles or the whole body by using promoters of zebrafish origin. <i>Dev. Biol.</i> 192, 289-299.				
		Khoo, H.-W., Ang, L.-H., Lim, H.B., and Wong, K.-Y. (1992). Sperm cells as vectors for introducing foreign DNA into zebrafish. <i>Aquaculture</i> 107, 1-19.				
		Lathe, R. and Mullins, J.J. (1993). Transgenic animals as models for human disease-report of an EC study group. <i>Transg. Res.</i> 2:286-299.				
		Liao, J., Chan, C.H., and Gong, Z. (1997). An alternative linker-mediated polymerase chain reaction method using a dideoxynucleotide to reduce amplification background. <i>Anal. Biochem.</i> 253, 137-139.				
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J. W. J. J.		10/24/01				
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		Lin, S., Yang, S., and Hopkins, N. (1994). LacZ expression in germline transgenic zebrafish can be detected in living embryos. <i>Dev. Biol.</i> 161, 77-83.				
		Liu, Z., Moav, B., Faras, A.J., Guise, K.S., Kapuscinski, A.R., and Hackett, P.B. (1990). Development of expression vectors for transgenic fish. <i>Biotechnology</i> 8, 1268-1272.				
		Long, Q., Meng, A., Wang, H., Jessen, J.R., Farrell, M.J., and Lin, S. (1997). <i>GATA-1</i> expression pattern can be recapitulated in living transgenic zebrafish using GFP reporter gene. <i>Development</i> 124, 4105-4111.				
		Maga, E.A. and J.D. Murray (1995). Mammary gland expression of transgenes and the potential for altering the properties of milk. <i>Bio/Technology</i> 13:1452-1457.				
		Meng, A., Tang, H., Ong, B.A., Farrell, M.J., and Lin, S. (1997). Promoter analysis in living zebrafish embryos identifies a <i>cis</i> -acting motif required for neuronal expression of <i>GATA-2</i> . <i>Proc. Natl. Acad. Sci. USA</i> 94, 6267-6272.				
		Moss, J.B., Price, A.L., Raz, E., Driever, W., and Rosenthal, N. (1996). Green fluorescent protein marks skeletal muscle in murine cell lines and zebrafish. <i>Gene</i> 173, 89-98.				
		Olson, E.N., Perry, M., and Schultz, R.A. (1995). Regulation of muscle differentiation by the MEF2 family of MADS box transcription factors. <i>Dev. Biol.</i> 172, 2-14.				
		Palmiter, R.D., Brinster, R.L., Hammer, R.E., Trumbauer, M.E., Rosenfeld, M.G., Birnberg, N.C. and Evens, R.M. (1982). Dramatic growth of mice that develop from eggs microinjected with metlothionein-growth hormone fusion genes. <i>Nature</i> 300:611-615.				
		Penman, D.J., Beeching, A.J., Penn, S., and Maclean, N. (1990). Factor affecting survival and integration following microinjection of novel DNA into rainbow trout eggs. <i>Aquaculture</i> 85, 35-50.				
		Powers, D.A., Hereford, L., Code, T., Creech, K., Chen, T.T., Lin, C.M., Kight, K., and Dunham, R. (1992). Electroporation: A method for transferring genes into the gametes of zebrafish (<i>Brachydanio rerio</i>), channel catfish (<i>Ictalurus punctatus</i>), and common carp (<i>Cyprinus capio</i>). <i>Mol. Marine Biol. Biotechnol.</i> 1, 301-308.				
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PATENT
1781-0163P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: GONG, Zhiyuan et al.
Appl. No.: New Group:
Filed: August 17, 2001 Examiner:
For: CHIMERIC GENE CONSTRUCTS FOR GENERATION
OF FLUORESCENT TRANSGENIC ORNAMENTAL
FISH

INFORMATION DISCLOSURE STATEMENT
(SUBMISSION CONCURRENT WITH THE
FILING OF A NEW PATENT APPLICATION)

Assistant Commissioner for Patents
Washington, DC 20231

August 17, 2001

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☒ Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☐ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

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Docket No. 1781-0163P

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

- a. ☒ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached patents, publications, or other information in the English language do not require a statement of relevancy.

- b. ☐ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

- c. ☐ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

- d. ☐ **OTHER**

The following additional information is provided for the Examiner's consideration.

09/913898
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Docket No. 1781-0163P

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By  #32,808

Gerald M. Murphy, Jr., #28,977

GMM/rem
1781-0163P

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Enclosures: ☒ Form PTO-1449(s)
☒ Documents
☐ Foreign Search Report
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☒ Other: International Search Report

(Rev. 01/22/01)